New Air Toxics Rule for the Surface Coating of Motor Vehicles and Mobile Equipment

Recently, the U.S. Environmental Protection Agency (USEPA) issued a final air toxics rule (Rule) for smaller emitting sources, called area sources. The Rule, which became effective on January 9, 2008, affects three source categories: paint stripping, surface coating of motor vehicles and mobile equipment, and miscellaneous surface coating. This article does not contain a review of the entire Rule but focuses on what information automotive collision repair facilities need to know.

Why Was This Rule Written?

The requirements in the Rule, when implemented, will reduce the emission of the following five targeted Hazardous Air Pollutants (HAPs) from surface coating operations: chromium, lead, manganese, nickel, and cadmium. In addition, the requirements are consistent with good environmental and worker health practices.

Who is Subject to the Rule?

All commercial automotive collision repair facilities are subject to the Rule. Specifically, the Rule regulates spray-applied surface coatings to motor vehicles (e.g., automobiles, light-duty trucks, golf carts, vans, and motorcycles) and mobile equipment (devices that may be hauled or driven on roadways, such as heavy-duty trucks, truck trailers, fleet delivery trucks, buses, mobile cranes, bulldozers, street cleaners, agricultural equipment, motor homes, and other recreational vehicles including fifth wheels and camping trailers). The Rule does not apply to the refinishing of mobile equipment for which it is not practical or feasible to move to a dedicated mobile equipment refinishing facility.

Spray-applied surface coating means that the coating is applied using a hand-held device that creates an atomized mist of coating and deposits the coating on a substrate. It does not include coatings applied from a hand-held, non-refillable aerosol container or a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces.

Mobile automotive refinishers that perform spot repairs at customer locations are subject to the Rule only if they use a spray gun with a cup size greater than 3.0 fluid ounces. Mobile refinishers still need to comply with all other applicable environmental regulations such as those pertaining to hazardous waste management and disposal.

Are Hobbyists that Restore Cars Subject to the Rule?

The Rule does not pertain to individuals that surface coat their own personal vehicles or other individual cars (with or without compensation) as long as the total number of cars they refinish in a year does not exceed two.

What if We Don't Use Coatings Containing the Targeted HAPs?

You can petition the USEPA for an exemption from the Rule. Petitions must include a description of the coatings that you spray-apply and a certification that you do not spray-apply any coatings containing one or more of the five targeted HAPs.

When Do I Have to Comply With the Requirements of the Rule?

It all depends on whether your facility is considered "new" or "existing." A new facility is one that initially began surface coating after September 17, 2007 or was reconstructed after September 17, 2007. Reconstructed means the fixed capital cost of replacement components exceeds 50% of the fixed capital cost required to construct a comparable new facility. An existing facility is one that began surface coating on or before September 17, 2007.

For existing facilities, compliance with the requirements must be achieved by January 10, 2011, unless otherwise stated. For new facilities, the compliance date is January 9, 2008 unless otherwise stated. If you are starting up a business after January 9, 2008, your compliance date is the date on which you start up the business.

What are the Rule Requirements for the Surface Coating of Motor Vehicles and Mobile Equipment?

ENCLOSURES

Spray-applied coatings must be applied in a preparation station or spray booth and meet the following requirements:

- The stations and booths must be fitted with a filter technology that can achieve at least 98% capture of paint overspray.
- For refinishing complete motor vehicles and mobile equipment, the preparation stations and spray booths must be fully enclosed with a full roof and four complete walls or side curtains and must be ventilated at negative pressure so that air is drawn into any openings in the station curtains or booth walls.
- If a spray booth is fully enclosed and has seals on all doors and openings and has an automatic pressure balancing system, it may be operated up to, but not more than, 0.05 inches of water gauge positive pressure.
- For refinishing vehicle subassemblies (i.e., fenders, bumper fascias, trim, etc.), the preparation station or spray booth must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so that air is drawn into the station or booth.

Portable or mobile ventilated enclosures are acceptable alternatives to a full-size preparation station or spray booth for small repairs. The enclosure does need to be ventilated so that the air is drawn into and paint overspray is captured by the enclosure. IMPORTANT: The enclosure is subject to the same filter technology required for full-size stations and booths.

TYPE AND CLEANING OF APPLICATION EQUIPMENT

All spray-applied coatings must be applied with a high-volume low-pressure (HVLP), electrostatic, air-assisted airless application, or an equivalent technology.

Paint spray guns must be cleaned so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects the used gun cleaning solvent. Acceptable options include hand cleaning of gun parts in a solvent container by flushing solvent through the gun without atomizing the solvent and paint residue, or using a fully enclosed spray gun washer.

TRAINING AND CERTIFICATION

Train and certify all spray equipment operators in the proper application of surface coatings, and the proper setup and maintenance of spray equipment.

- New facilities must train and certify operators no later than 180 days after hiring. or by July 7, 2008, whichever is later.
- Existing facilities must train and certify operators no later than 180 days after hiring or by January 10, 2011, whichever is later.

- Initial training will not be required if it can be demonstrated that a spray equipment operator's
 work experience and/or previous training meets the requirements in the Rule and is within
 five (5) years of the date the training is required.
- Spray equipment operators must be re-certified every five (5) years.
- Initial and refresher training must, at a minimum, meet the following requirements:
 - ✓ A list must be maintained of current personnel (by name and job description) who are required to be trained.
 - ✓ Hands-on and classroom instruction that addresses, at a minimum, the following:
 - Spray gun equipment selection, setup, and operation; including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate.
 - Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke.
 - Routine spray booth and filter maintenance, including filter selection and installation.
 - o Environmental compliance with the requirements of this Rule.
 - A description of methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of training.

TIP: Consult with your vendor, as many programs are already available that meet or exceed this criteria.

RECORDKEEPING

Maintain all records for at least five (5) years. Copies of records must be kept on-site for at least two (2) years. Records should include:

- Training certifications with the date, the initial, and the most recent refresher training completed.
- Documentation of the filter efficiency of the exhaust filter material.
- Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces that does not meet the definition of an HVLP, electrostatic, airless, or air-assisted airless spray gun, has been determined to achieve equivalent transfer efficiency to one of these technologies.
- Approval to use alternative spray gun technology, if applicable.
- Copies of Initial and Compliance Notifications.
- Copies of Annual Notification of Changes Report.
- Records of any assessments of facility compliance performed in support of the Initial Notification, Notification of Compliance Status, or Annual Notification of Changes Report.
- Records of any deviations from the requirements of this Rule (e.g., date and time period of deviation, description, and actions taken to correct the deviation).

NOTIFICATIONS AND REPORTS

Initial Notification

- New facilities must submit the Initial Notification no later than 180 days after initial startup or by July 7, 2008, whichever is later.
- Existing facilities must submit this form no later than January 11, 2010.

Notification of Compliance Status

- New facilities are not required to submit a separate Notification of Compliance Status in addition to the Initial Notification provided you were able to certify compliance as part of the Initial Notification and your compliance status has not changed since.
- Existing facilities that did not certify compliance in the Initial Notification must submit a Notification of Compliance Status form on or before March 11, 2011.

Annual Notification of Changes Report

- Submit a report in each calendar year in which information previously submitted in the Initial Notification, Notification of Compliance Status, or a previous Annual Notification of Changes Report has changed.
- Must be submitted prior to March 1 of each calendar year <u>only if</u> reportable changes have occurred.

Who Will be Enforcing the Rule?

The state of Michigan does not have delegation of the Rule. The USEPA will be the agency enforcing the Rule and accepting the petitions and notifications.

What are the Requirements for Paint Stripping Operations Using Methylene Chloride (MeCl) Containing Strippers?

A variety of Best Management Practices (BMPs) must be implemented to minimize evaporative emissions of methylene chloride when removing coatings from metal plastics and other substrates. If a facility is using more than one ton of methylene chloride annually, in addition to implementing the BMPs, they are required to develop and implement a MeCl Minimization Plan.

Where Do I Go for More Information?

To obtain a copy of the final Rule as it appears in the Federal Register, go to http://www.epa.gov/fedrgstr/EPA-AIR/2008/January/Day-09/a24718.pdf. The Rule begins on page 1760.

The DEQ's Environmental Assistance Program offers free assistance to small businesses with environmental questions. Call us at 800-662-9278 from 8:00 am to 4:00 pm Monday through Friday. Please watch our Website for updated information about this and other rules and regulations that pertain to automotive collision repair facilities. Go to www.michigan.gov/deqenvassistance and select "Automotive Collision Repair Facility Workbook" under the heading "Compliance Assistance Guides & Workbooks." Notification forms will be posted on this Website soon.